

Description

Low impedance
Low ESR
Wide frequency range
Wide operating temperature range

Applications

Power supplies
Consumer electronics
Industrial electronics

Electrical characteristics

Operating temperature: -25°C ÷ 85°C
 Rated voltage: 400VDC ÷ 450VDC
 Rated capacitance: 100µF ÷ 940µF
 Capacitance tolerance (at 100Hz, 20°C): -20% +20%
 Dissipation factor (at 100Hz, 20°C): 0,15 ÷ 0,18
 Leakage current (after 5 minutes application of rated voltage): $I = 0,005 \cdot C \cdot U$
 I - current [µA]
 C - rated capacitance [µF]
 U - rated voltage [V]

The aluminum case capacitors are supplied with PVC sleeve insulation and a safety vent located on end-deck. Plus pole is marked on the perimeter

Load life:

Load life is 2000 hours (at maximum operating temperature, at rated voltage and AC current load as per Table 1).

After 2000 hours of the above application of rated voltage and current load, capacitors must meet the following characteristics requirements:

Capacitance change <= +/- 15% of initial value

Tan δ <= 150% of initial value

Leakage current <= initial value

AC Load:

The maximum AC load at maximum operating temperature (85°C) is given in Table 1. The AC load can be increased at lower operating temperatures by coefficient as per Table 2, with capacitor life expectancy unaffected.

01
table

Type Number	Rated Capacitance C_N [µF]	Rated Voltage U_N [V]	Dimensions [D x L mm]	max.tanδ at 100Hz, 20°C	lac [mA]	Drawing Number
MNH 040	100	400	22x42	0,15	600	1
MNH 040	150	400	25x42	0,15	800	1
MNH 040	220	400	30x50	0,15	1000	1
MNH 040	330	400	30x50	0,18	1400	1
MNH 040	470	400	35x50	0,18	1800	1
MNH 045	180	450	25x42	0,15	900	1
MNH 045	390	450	35x50	0,18	1500	1
MNH 045	940	450	40x68	0,18	3500	2

02
table

Coefficient for permissible lac increase	2,3	2,0	1,7	1,53	1,3	1,15	1,0
Operating temperature	$\leq 40^\circ\text{C}$	45°C	50°C	55°C	60°C	70°C	85°C

